IMPACT OF DIGITALISATION ON TEACHING AND LEARNING PROCESS IN SCIENCE CLASSROOM

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ABSTRACT

Study of science had always remained the important part of curriculum, to make the curriculum more productive the digital learning approach was introduced. The present study is to know the impact of digitalization on teaching learning process in science classroom. Hence the study was conducted by randomly selecting few students from Government school; the students were then divided into two groups in which some students were taught by regular mode of teaching and the other group were taught digitally, then an objective – type test was conducted to know the difference between the performance of both the groups. Post-test it was found that the students who were taught digitally performed slightly better than the one taught by traditional mode. The questionnaire was also taken from the teachers to know the challenges faced by them in teaching digitally, and their opinion was also considered that which mode they would prefer in regular teaching. Teachers also prefer using the digital mode of teaching because it has enhanced their teaching experience and also shown the considerable difference in students' academic performance.

KEYWORDS: Digital learning, science, teaching, learning, teachers, students

INTRODUCTION:

The digitalization had become the need of time. The teaching learning process had also become digitalized with introducing digital learning approach in current education scenario. The present scenario demands the use of various ICT based approach in teaching, to enhance the performance of the students. Various audio-visual devices including projectors are used to enhance the learning experience for students, so they develop better skills for their betterment in academic performance.

Digital approach learning was first introduced in United States of America, and now it has became the integral part of the curriculum to teach students throughout the globe.

The digital teaching learning is basically a child centered approach of teaching. In which the students can learn themselves without or very less help of the teachers. They can rewind as many time to see again and again if they don't understand any concept.

The study is to know the impact of technology in teaching science to secondary school students. After the digitalization of education how the students of the present generation are able to adapt the concepts and reflect it academically.

Not only the students teachers are also the pillars of the teaching learning scenario so the researcher wants to know the challenge and opportunities that they see in digitalized teaching.

The result of the study will be useful to know which form of teaching is more desirable by the students and teachers and with which mode they are able to excel in their performance.

The digitalized learning is has changed the way teachers teach and students learn in school with innovation. Watching and listening to power point presentation, online videos, audio clips and various animation of experiment had made learning a fun. Learning topics by passively watching the teacher writing in the blackboard is no more the demand of the nation.

Today's world needs change and every one should take the step forward in accepting this change with open hands.

OBJECTIVES OF STUDY:

The following are the objectives of the study:

1. To study the impact of digital learning on student's academic performance.

2. To know the form of teaching i.e. regular or digital is more productive in case of student's performance.

3. The group that performed better than in terms of their academic achievement.

HYPOTHESIS:

1. There is significant difference between the academic performance when taught in two different groups i.e. digitally or regular mode of teaching.

RESEARCH METHODOLOGY:

To conduct the study two groups of students were selected from Government school total 30 students from class 8th were randomly selected as a sample they were divided into two groups namely A and B. In which the students belonging from Group A were taught in their regular classroom and on the other hand Group B students were taught in digital classroom following various digital approach, same topics were taught to both the groups. After 15 days an objective type test was conducted and they were awarded score out of 20 for both the groups as a tool to know their performance.

Major Findings:

To know the result and understand the difference between the performances of the two groups of students who were taught through digital mode and traditional mode. To understand which group performed better we took average, variance and t-value for both the groups.

The results are as follows:

Group	Mean	Standard Deviation	Variance	t-value
A	7.73	3.88	15.06	4.60
B	14.13	3.73	13.98	

Hence the t-ratio of the students who were taught digitally as well as the students who were taught through regular mode is 4.60.

Analysis:

Hence it was found that there were significant differences between the performance of the students who were taught through digital learning resource and who were taught through regular means.

The performance of the students who were taught through the digital means had shown better performance than those who learnt through regular means.

Hence our Hypothesis is accepted. It is proved that there were significant difference between the academic performance when taught through digital means.

CONCLUSION

Hence it can be concluded that the digital learning approach is comparatively better than the regular black board and lecture method of teaching, such type of study should also be conducted in various levels of students to know the positive outcomes of digitalization, and to understand the real impact of digitalization on the teaching learning process at various levels.

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